

derivative thereof capable of converting D-glucuronic acid (GlcA) to L-iduronic acid (IdoA), comprising cultivation of a cell line transformed with the above recombinant expression vector in a nutrient medium allowing expression and secretion of said epimerase or functional derivative thereof.

Specific DNA sequences according to the invention are defined in appended claims 2, 3 and 4.

Furthermore, the invention provides for a host cell transformed with such recombinant expression vector.

Finally, the invention covers a glucuronyl C-5 epimerase or a functional derivative thereof whenever prepared by the process outlined above.

~~Brief description of the figures~~
~~Brief description of the appended figures and sequence listing.~~

Sequence listing: Nucleotide sequence and the predicted amino acid sequence of the C5-epimerase. The predicted amino acid sequence is shown below the nucleotide sequence. The numbers on the right indicate the nucleotide residue and the amino acid residue in the respective sequence. The five sequenced peptides appear in **bold**. The N-terminal sequence of the purified protein is shown in **bold and italics**. The potential N-glycosylation sites (*) are shown. The potential transmembrane region is underlined.

BRIEF DESCRIPTION OF THE FIGURES

Fig 1. In vitro transcription-translation. The epimerase cDNA was inserted into a pCDNA3 expression vector and linearized with XbaI at the 3'-end. It was then subjected to in vitro transcription-translation in a rabbit reticulocyte lysate system in the presence of [³⁵S]methionine, as described in "Experimental Procedures". The translation product of epimerase cDNA (Epi) has a molecular weight of ~50 kDa, by comparison with the LMW protein standard. A 118 kDa control sample of β-galactosidase

09403269-101899

DJS
12/11/03

sub
D

DJS
12/11/03

D